

## ABSTRACT OF THE DISCLOSURE

In an object recognition apparatus using a radar unit for a vehicle, in mounting the radar unit on the vehicle, a transmission wave is outputted  
5 throughout an appropriate angular range in a forward direction of the vehicle in a state where a margin is given to a tolerance of the mounting angle of the radar unit on the vehicle. Laser beams are radiated at a target placed at a predetermined positional relationship relative to the radar unit mounted on the vehicle to extract a laser beam which provides the maximum light-reception intensity in each of the  
10 X-axis and Y-axis directions. Moreover, a predetermined angular range is set in each of the X-axis and Y-axis directions so that the laser beam which provides the maximum light-reception intensity is centered therein, and the predetermined angular range is used as a recognition area.